InP widely tunable laser

Marconi Optical Components (Caswell, UK) claims its "Digital Supermode - Distributed Bragg Reflector" (DS-DBR) InP-based wideband tunable laser could drive down the costs of optical networking gear, offers improved tuning characteristics that enables real-time wavelength reconfiguration and better reliability than conventional four-section DBR lasers.

A novel type of reflector in the front end reduces losses and simplifies control. The operation of the front-end section reduces the tuning 'map' of the device, so that the device effectively has only two dimensions: a tuning current and a phase current.

Only a short grating at the front needs to be excited, so there is little induced optical loss when the device is tuned.

Marconi will integrate the DS-DBR laser into transmitter products as well as GaAs modulators to offer 10 and 40 Gb/s tunable transmitter subsystems one third the size of existing discrete optical subassemblies, eliminate the need for costly fiber splicing.

Marconi plans volume shipment by mid-2002.

US$1.5m for Fiberspace

Tunable laser product developer **Fiberspace Inc** (Woodland Hills, CA, USA) has received US$1.5m in equipment financing from Comerica Bank's Technology and Life Sciences Division.

Its Optical Phase Locked Loop (OPLL) technology (announced in October) maximizes the efficiency of optical spectrum use to increase the transmission capacity of existing fibre lines while lowering the cost per bit for metro and long-haul networks. OPLL also provides long-term wavelength stability and absolute accuracy for ultra-dense WDM applications.

First compliant VCSEL module

Emcore Corp (Somerset, NJ, USA) became the first VCSEL maker to comply with the Optical Internetworking Forum's VSR-1 SONET OC-192 data-rate implementation agreement (OIF-VSR4-0.10) by offering a new 300-pin transponder module for very short reach (VSR) interconnects. The electrical interface also specifically complies with the OIF SERDES Framer Interface 4 (SFI-4) Implementation Agreement, for compatibility with OC-192 framer ICs, says Rob Bryan, vice president of the fiberoptics division in Albuquerque, NM, USA.

The MTR8500 uses a 1x12 array of 850 nm oxide-confined VCSELs for multi-mode fibre ribbon cable. The package dimensions and pin assignments follow the 300-pin OC-192 Transponder MSA and are plug compatible with other 300-pin OC-192 transponder products. It will be followed by a small form factor version.